

DISCUSSION OF THE AMENDMENT

The claims, where applicable, have been amended by changing “phosphate of cellulose II“ back to --cellulose II phosphate--.

No new matter is believed to have been added by the above amendment. With entry thereof, Claims 1-18 will remain pending in the application.

REMARKS

Applicants thank the Examiner and the Examiner's supervisor for the courtesy extended to Applicants' attorney during the interview held November 13, 2007, in the above-identified application. During the interview, Applicants' attorney explained the presently-claimed invention and why it is patentable over the applied prior art, and discussed other issues raised in the Office Action. The discussion is summarized and expanded upon below.

The rejection of Claims 1-18 under 35 U.S.C. § 103(a) as unpatentable over US 6,579,977 (Pieschel et al) in view of US 4,981,515 (Hiroka et al), and further view of Applicants' admissions, is respectfully traversed.

In response to Applicants' arguments that one skilled in the art would not have combined Pieschel et al and Hiroka et al without the present disclosure as a guide, since there was no reasonable foreseeability as to what the result would be by replacing the cellulose I of Pieschel et al with the regenerated cellulose of Hiroka et al; that neither reference discloses or suggests the presently-recited limitation of degree of phosphorylation; that neither reference could have predicted the improvement in adsorption capability by using cellulose II phosphate in place of cellulose I phosphate, as shown by the comparative data in the specification herein, at [0030]-[0042], the Examiner finds that since there is only a limited number of well recognized polymorphs of cellulose, i.e., Cellulose I-IV, and as Cellulose II is among the most widely used polymorphs of cellulose, one skilled in the art would have used Cellulose II in place of Cellulose I "to achieve beneficial effects arriving at the instant invention. Such changes are considered within the routine skills of one of ordinary skill in the art, and amounts to nothing more than optimization of the invention disclosed in Pieschel's by changing one ingredient for another well known ingredient. Thus, the claim would have been obvious because the substitution of one known element for another would have yielded predictable results to one of ordinary skill in the art...."

In reply, and as Applicants' attorney pointed out during the above-referenced interview, the missing element in the Examiner's response is an absence of any recognition in the art of any expected equivalence or interchangeability of Cellulose I and Cellulose II when phosphated, and well as any equivalence or interchangeability of the phosphates in terms of their respective absorption capability. The fact that there may be a limited number of polymorphs of cellulose is irrelevant because without the present disclosure as a guide, there would have been no reason to replace Cellulose I with Cellulose II.

During the above-referenced interview, the Examiner commented on the disclosure in Hiroka et al that their regenerated cellulose composition is, *inter alia*, "high adsorptive." As Applicants' attorney replied, the term "high adsorptive" discloses nothing vis-à-vis Cellulose II compared to Cellulose I because cellulose phosphates generally are known to have adsorptive capability. The significance of the present invention herein is Applicants' discovery that the use of Cellulose II compared to Cellulose I results in unexpectedly greater adsorptivity.

It is noted that the Examiner has made no findings with regard to the above-discussed comparative data, nor has the Examiner made any finding with regard to the limitation in the claims of degree of phosphorylation.

Finally, the Examiner relies on Applicants' argument in response to a rejection under 35 U.S.C. § 112, second paragraph, that in the present invention, there is no criticality with regard to the amount of carbamidation, as an admission of prior art herein.

In reply, and as Applicants' attorney explained during the interview, Applicants' statement of no criticality is part of Applicants' discovery (which is the same as stating that any amount of carbamidation is equivalent to any other amount thereof) and is not an admission of prior art. Compare *In re Ruff*, 256 F.2d 590, 118 USPQ 340, 347 (CCPA 1958) (**copy enclosed**) ("To rely on an equivalence *known only to the applicant* to establish

obviousness is to assume that his disclosure is a part of the prior art. The mere statement of this proposition reveals its fallaciousness.”)

For all the above reasons, it is respectfully requested that this rejection be withdrawn.

The rejection of Claims 1-8 under 35 U.S.C. § 103(a) as unpatentable over CA 868344 (Clermont et al) in view of Pieschel et al, and further view of Applicants' admissions, is respectfully traversed.

In response to Applicants' arguments that one skilled in the art would not have combined Clermont et al and Pieschel et al without the present disclosure as a guide, since there was no reasonable foreseeability of the metal adsorption properties obtainable by replacing the cellulose I of Pieschel et al with, for example, the mercerized or aged alkali cellulose of Clermont et al; that neither reference could have predicted the improvement in adsorption capability by using cellulose II phosphate in place of cellulose I phosphate, as shown by the above-discussed comparative data; that Clermont et al discloses nothing with regard to adsorption of metal ions, and that Clermont et al neither discloses nor suggests the presently-recited phosphorylation degree, the Examiner finds that metal ion adsorption is an ion-exchange process in which the phosphorous groups bind to metal ions which was well recognized by Clermont et al, and Pieschel et al also discloses the use of phosphorylated cellulose for metal adsorption. The Examiner then cites various case precedent for the proposition that one cannot show unobviousness by attacking references individually where the rejections are based on combinations of references.

In reply, even if one skilled in the art would find it *prima facie* obvious to use Clermont et al's materials for adsorbing metal ions, Applicants have not argued Clermont et al and Pieschel et al individually, but traversed the rejection as made. As discussed above with regard to the other prior art rejection, the Examiner has not responded at all to the

above-discussed comparative data or the fact that neither reference discloses the presently-recited limitation of degree of phosphorylation.

For all the above reasons, it is respectfully requested that this rejection be withdrawn.

The rejection of Claims 1-8 under 35 U.S.C. § 112, first paragraph, as failing to comply with the written description requirement, is respectfully traversed. While Applicants maintain that there is no difference in meaning between the original term “Cellulose II phosphate” and the term “the phosphate of Cellulose II,” nevertheless, the rejection is now moot in view of the above-discussed amendment.

Accordingly, it is respectfully requested that this rejection be withdrawn.

The rejection of Claims 1-8 under 35 U.S.C. § 112, second paragraph, is respectfully traversed. With regard to the term “the phosphate of Cellulose II”, it is now moot, for reasons discussed above. In addition, with regard to the terms “may be partially carbamidated, and “may be partly carbamidated”, Applicants acknowledge the Examiner’s withdrawal of this rejection. Applicants note that the term “may be” is intended to mean --is optionally--.

Accordingly, it is respectfully requested that this rejection be withdrawn.

All of the presently-pending claims in this application are now believed to be in immediate condition for allowance. Accordingly, the Examiner is respectfully requested to pass this application to issue.

Respectfully submitted,

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